

UNITED STATES OF AMERICA
CIVIL AERONAUTICS BOARD
WASHINGTON, D. C.

Civil Air Regulations Amendment 60-10

Effective: August 15, 1958

Adopted: June 6, 1958

AIR TRAFFIC RULES
CRUISING ALTITUDES

Part 60 of the Civil Air Regulations currently specifies certain cruising altitudes appropriate to the direction of flight. These rules differ depending on whether the flight is in controlled or uncontrolled airspace. Outside controlled airspace above 3,000 feet and with less than 3 miles visibility, pilots are required to comply with a quadrantal rule. Aircraft being operated in controlled airspace are required to be flown at odd or even thousand-foot altitudes as specified by the Administrator. These rules specify a rather complex system of determining altitudes by direction of flight on colored airways and VOR airways, which is modified by a priority system for colored airways, and further modified where colored and VOR airways coincide or cross. For irregular portions of airspace designated as controlled areas there is no altitude specification. A proposal to provide a single simplified system to determine appropriate cruising altitudes was circulated for comment, among others not here discussed, in Civil Air Regulations Draft Release No. 57-27 dated December 10, 1957.

It was apparent from comment received pursuant to this draft release that there is widespread agreement that the present cruising altitude rules have grown so complex as to become increasingly ineffective and early adoption of the new rules was urged.

This amendment providing for semi-circular rules requires VFR aircraft (or aircraft on no flight plan) to cruise at odd thousands plus 500 feet when on magnetic courses of 0° to 179° inclusive; and at even thousands plus 500 feet when on courses of 180° to 359° inclusive below 29,000 feet. Aircraft operating on an IFR flight plan with a specific altitude assignment would be normally conducted at odd thousands on magnetic courses of 0° to 179° and even thousands on courses of 180° to 359°. More simply, aircraft operating under VFR rules would cruise at plus 500-foot altitudes and IFR traffic would normally cruise at cardinal altitudes. This arrangement establishes a degree of separation between the IFR cruising altitude rules and the VFR cruising altitude rules, which is advisable in light of the growing utilization of the one-way airway procedures.

The advantage of the new semi-circular rules would be to establish a single system to apply in all airspace (i.e., in and outside of controlled airspace). This will resolve the difficulties of determining proper cruising altitudes along airways, crossing airways, and in the large controlled areas that had previously been without any designated altitudes. Further, it simplifies the rules to be followed when operating outside of airways and other controlled areas.

In order to provide for aircraft operating under the instrument flight rules and cleared by air traffic control to maintain "VFR conditions on top," such flights will be required to comply with the altitude rules prescribed for VFR flight.

In commenting on Draft Release 57-27, recommendations were received from the military and the Air Transport Association, and later endorsed by other users, to modify the cruising altitude rules above 29,000 feet so as to provide a degree of separation between IFR and VFR flights in a manner similar to the system proposed below 29,000 feet. It was contended that this modification would establish a uniform system to determine appropriate cruising altitudes at high, as well as low altitudes, thereby providing separation of cruising VFR and IFR traffic at all altitudes. This modification would provide aircraft operating VFR above 29,000 feet on reciprocal courses with a minimum vertical separation of at least 2,000 feet. Aircraft operating on an IFR flight plan with a specific altitude assignment would normally be separated by 1,000 feet from VFR aircraft on reciprocal courses.

The Board believes there is merit in these recommendations. It had proposed that the rule change be effective below 29,000 feet only because the high altitude quadrantal rule (above 29,000 feet) which provides for 2,000 feet of separation, as contrasted with 1,000 feet separation below that altitude, was believed to provide satisfactory vertical separation between cruising aircraft in different directions and therefore did not require amendment. The advantage of one uniform system is obvious however, and since there are no offsetting disadvantages the system should apply above 29,000 feet as well as below.

Interested persons have been afforded an opportunity to participate in the making of this amendment (22 F.R. 9868), and due consideration has been given to all relevant matter presented.

In consideration of the foregoing, the Civil Aeronautics Board hereby amends Part 60 of the Civil Air Regulations (14 CFR Part 60, as amended) effective August 15, 1958.

1. By amending § 60.32 to read as follows:

60.32 VFR cruising altitudes. When an aircraft is operated in level cruising flight at 3,000 feet or more above the surface, the following cruising altitudes (Mean Sea Level) shall be observed:

(a) Below 29,000 feet. At an altitude appropriate to the magnetic course being flown as follows:

(1) 0° to 179° inclusive, at odd thousands plus 500 (3,500; 5,500; etc.).

(2) 180° to 359° inclusive, at even thousands plus 500 (4,500; 6,500; etc.).

(b) Above 29,000 feet. At an altitude appropriate to the magnetic course being flown as follows:

(1) 0° to 179° inclusive, at 4,000-foot intervals beginning at 30,000 (30,000; 34,000; etc.).

(2) 180° to 359° inclusive, at 4,000-foot intervals beginning at 32,000 (32,000; 36,000; etc.).

2. By amending § 60.44 to read as follows:

60.44 IFR cruising altitudes. When an aircraft is operated in level cruising flight, it shall be operated in accordance with the following cruising altitudes:

(a) Within controlled airspace. At altitudes authorized by air traffic control. In the absence of a specific altitude authorized by air traffic control, aircraft operating "on top" shall be flown at altitudes specified in § 60.32.

(b) Outside controlled airspace - below 29,000 feet. At an altitude appropriate to the magnetic course being flown as follows:

(1) 0° to 179° inclusive, at odd thousands (1,000; 3,000; etc.).

(2) 180° to 359° inclusive, at even thousands (2,000; 4,000; etc.).

(c) Outside controlled airspace at and above 29,000 feet in Alaska and other territorial possessions of the United States. At an altitude appropriate to the magnetic course being flown as follows:

(1) 0° to 179° inclusive, at 4,000-foot intervals beginning at 29,000 (29,000; 33,000; etc.).

(2) 180° to 359° inclusive, at 4,000-foot intervals beginning at 31,000 (31,000; 35,000; etc.).

(Sec. 205 (a), 52 Stat. 984; 49 U.S.C. 425 (a). Interpret or apply sec. 601, 52 Stat. 1007, as amended; 49 U.S.C. 551)

By the Civil Aeronautics Board:

/s/ Marvin Bergsman

Marvin Bergsman
Acting Secretary

(SEAL)